

A Level Biology A
H420/01 Biological Processes

Question Set 9

9 (a) (i) Outline the importance of photosynthetic pigments in photosynthesis.

[4]

(ii) Chromista are photosynthetic protocists that live in water.

Chromista are different from other photosynthetic organisms because they contain the pigment chlorophyll *c*.

Chlorophyll *c* is not found in plants.

The wavelengths of light absorbed by chlorophyll *c* are different from those wavelengths absorbed by chlorophyll *a* and chlorophyll *b*.

Suggest why Chromista need pigments that are different from those of other photosynthetic organisms.

[1]

9 (b) Fig. 17.1 is a diagram of the chloroplast found in a Chromista cell.

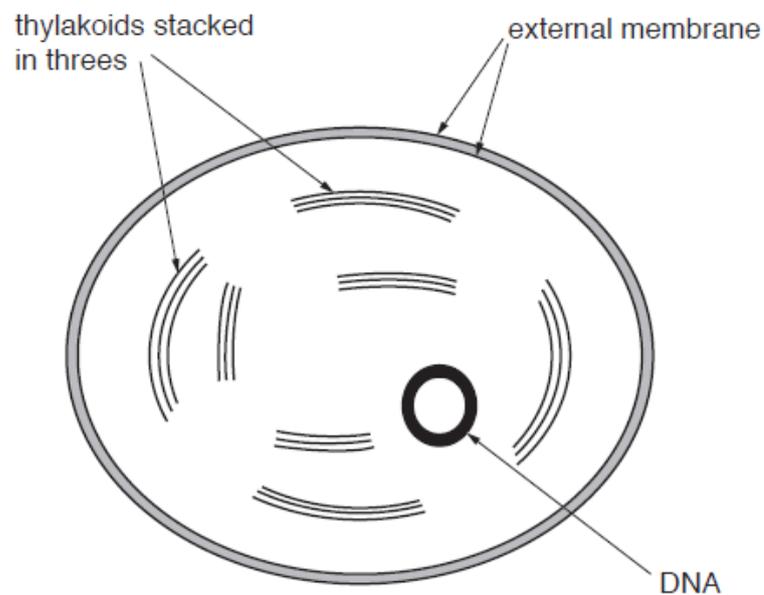


Fig. 17.1

Outline the structural differences between the Chromista chloroplast in Fig. 17.1 and the chloroplasts found in flowering plants.

[3]

- 9 (c) (i) Fig. 17.2 is a diagram of part of the plasma membrane of a Chromista cell.

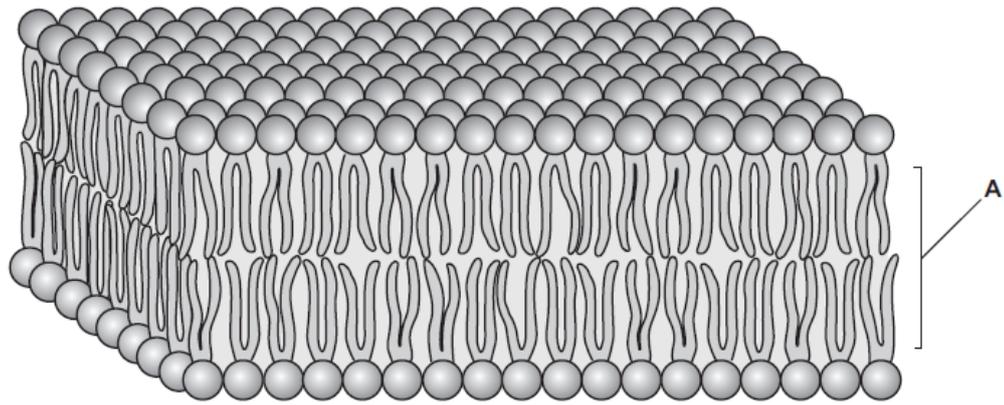


Fig. 17.2

State and explain how **one** property of region **A** in Fig. 17.2 contributes to the stability of the plasma membrane.

[2]

- 9 (c) (ii) There are differences between the plasma membrane and membranes within cells.

Outline the role of membranes **within** cells.

[2]

Total Marks for Question Set 9: 12

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